ABSTRACT

A secret file access authorization system with fingerprint limitation includes an authorization module, an encryption module and a certification module in the server linked by the programs; and at least one client machine, each is provided with a user module that contains a kernel encryption/decryption unit embedded in the client operation system kernel, and thus it can be realized that the access authorization to the secure files is limited by environment fingerprint or time fingerprint. Therein the authorization module provides the authorization secret key and the fingerprint template; the encryption module accepts the input of the authorization secret key and the secret files to be encrypted and provides the decryption secret key; the user module accepts the authorization secret key and the encrypted secret files, and presents a claim for the authorization secret key certification to the certification module; the certification module accepts the decryption secret key and the authorization secret key certification claim as well as the fingerprint template, and provides the certified decryption secret key for the user module, so as to start up the kernel encryption/decryption unit in the user module, and achieve the reading and writing of the encrypted files.